CLAIMS

We claim:

1. A method for generating and creating content to be associated with a program by using one or more addresses identifying one or more online information sources, the method comprising the steps of:

    generating online content, wherein the online content is intended to be presented automatically at a user device concurrently with or in conjunction with the program and wherein the online content is related to the program; and

    selecting at least one address, wherein the address identifies the online content at a particular online information source.

2. A method as described in claim 1, further comprising the step of associating a time stamp with the address, wherein the time stamp indicates to the user device when, during the program, to present the online content identified by the address.

3. A method as described in claim 1, wherein the address is an Internet URL, the URL identifying the online content.

4. A method as described in claim 1, further comprising the step of storing the address in a memory device.

5. A method as described in claim 4, wherein the memory device is at least one selected from the group consisting of: magnetic tape, compact disc, digital versatile disc, a server, computer hard drive, random access memory, read only memory, CD ROM, a magnetic data storage medium, and an optical data storage medium.

- 28 -

6. A method as described in claim 1, wherein the online information source is an Internet service provider.

7. A method as described in claim 1, wherein the online content comprises content in a form selected from the group consisting of: text, graphics, video, data, audio, animation, video stills, slow frame video, and multimedia.

8. A method as described in claim 1, wherein the online content relates to a sports program.

9. A method as described in claim 1, wherein the online content relates to an advertisement program.

10. A method as described in claim 1, wherein the online content is an advertisement.

11. A method as described in claim 1, wherein the online content relates to a motion picture program.

12. A method as described in claim 1, wherein the online content relates to a game show program.

13. A method as described in claim 1, wherein the online content relates to a video program.

14. A method as described in claim 1, wherein the online content relates to a live program.

15. A method as described in claim 1, wherein the online content relates to an audio program.

16. A method as described in claim 1, wherein the online content relates to a music video program.

17. A method as described in claim 1, wherein the online content relates to a pre-recorded program.

18. A method as described in claim 1, wherein the online content relates to a news program.

19. A method as described in claim 1, wherein multiple addresses are stored in a link file in a server.

20. A method as described in claim 1, wherein the online content is selected based on a profile of a collection of users.

21. A method as described in claim 1, wherein the address selecting step further comprises the step of obtaining a specific time point, wherein the time point indicates when to transmit the address to the user device.

22. A method as described in claim 1, wherein the online content relates to a sitcom program.

23. A method as described in claim 1, wherein the online content relates to an interactive game show program.

24. A method as described in claim 1, wherein the online content is stored in one selected from the group consisting of: magnetic tape, compact disc, digital versatile disc, computer hard drive, random access memory, read only memory, CD ROM, a magnetic data storage medium, and an optical data storage medium.

25. A method as described in claim 1, wherein the online content relates to a polling question.

26. A method as described in claim 16, wherein the online content contains additional information related to the music video program, the additional information selected from the group consisting of: biographical information on an artist, a concert schedule, and information on buying goods related to the artist.

27. A method as described in claim 1, wherein the online content contains a query for the user to respond to a poll.

28. A method as described in claim 1, wherein the online content is selected based, at least in part, on a user profile.

29. A method as described in claim 1, wherein the program is selected based, at least in part, on a user profile.

30. A method as described in claim 29, wherein the user profile is stored in a storage device at one of the locations selected from the group consisting of: a user station, a personal computer, a cable head-end, a cable box, a satellite receiver, an intranet site, an Internet site, and a satellite operations center.

31. A method as described in claim 1, wherein the address relates to a polling question.

32. The method of claim 1, further comprising the step of retrieving information about a user from a data management storage device.

33. A method as described in claim 32, wherein the method further comprises the step of performing an analysis on the user information.

- 31 -

34.   A method as described in claim 32, wherein the user information contains user clicks made by the user on a user interface while using an online service provider.

35.   A method as described in claim 32, wherein information about a plurality of users is stored in the data management storage device.

36.   A method as described in claim 32, wherein the user information contains information selected from the group consisting of: the geographic location of the user, clicks made by the user on a user interface while using an on line service sources, user viewing habits, and demographics of the user.

37.   A method as described in claim 32, wherein the method further comprises the step of generating the program based, at least in part, on the user information.

38.   A method as described in claim 32, wherein the data management storage device is located at a location selected from the group consisting of: a user station, a personal computer, a cable head-end, a cable box, a satellite receiver, an intranet site, a public network, a private network, and an Internet site.

39.   A method as described in claim 32, wherein the program contains a predetermined advertisement and wherein selection of the predetermined advertisement is based, at least in part, on the user information.

40.   A method as described in claim 32, wherein the online content is based, at least in part, on the user information.

41.·   A method as described in claim 32, wherein the address is selected, at least in part, based on the user information.

- 32 -

42.   A method as described in claim 32, wherein the online content contains an advertisement and wherein the advertisement is selected, at least in part, based on the user information.

43.   A method as described in claim 32, wherein the programming signal contains a graphics segment and wherein the graphics segment is selected, at least in part, based on the user information.

44.   A method for generating programming and corresponding related online information content obtained from an online information source, the method comprising the steps of:

generating programming;

generating online information content, wherein the online information content is intended to be retrieved and displayed automatically at a user device concurrently with or in conjunction with the programming; and

selecting an address, wherein the address specifies the online information source associated with the online information content.

45.   A method as described in claim 44, further comprising the step of associating a time stamp with the address, wherein the time stamp indicates to the user device when, during the programming, to present the online information content associated with the address.

46.   A method as described in claim 44, wherein the address is an Internet URL, the URL identifying the online information source which is a particular Internet site.

- 33 -

47.   A method as described in claim 44, further comprising the step of storing the address in a memory device.

48.   A method as described in claim 47, wherein the memory device is at least one selected from the group consisting of: magnetic tape, compact disc, digital versatile disc, a server, computer hard drive, random access memory, read only memory, CD ROM, a magnetic data storage medium, and an optical data storage medium.

49.   A method as described in claim 44, wherein the online information source is an Internet service provider.

50.   A method as described in claim 44, wherein the online information content comprises content in a form selected from the group consisting of: text, graphics, video, data, audio, animation, video stills, slow frame video, and multimedia.

51.   A method as described in claim 44, wherein the online information content relates to a sports program.

52.   A method as described in claim 44, wherein the online information content relates to an advertisement program.

53.   A method as described in claim 44, wherein the online information content is an advertisement.

54.   A method as described in claim 44, wherein the online information content relates to a motion picture program.

55.   A method as described in claim 44, wherein the online information content relates to a game show program.

- 34 -

56.   A method as described in claim 44, wherein the online information content relates to a video program.

57.   A method as described in claim 44, wherein the online information content relates to a live program.

58.   A method as described in claim 44, wherein the online information content relates to an audio program.

59.   A method as described in claim 44, wherein the online information content relates to a music video program.

60.   A method as described in claim 44, wherein the online information content relates to a pre-recorded program.

61.   A method as described in claim 44, wherein the online information content relates to a news program.

62.   A method as described in claim 44, wherein multiple addresses are stored in a link file in a server.

63.   A method as described in claim 44, wherein the online information content is selected based on a profile of a collection of users.

64.   A method as described in claim 44, wherein the address selecting step further comprises the step of obtaining a specific time point, wherein the time point indicates when to transmit the address to the user device.

65.   A method as described in claim 44, wherein the content relates to a sitcom program.

66.   A method as described in claim 44, wherein the content relates to an interactive game show program.

67.   A method as described in claim 44, wherein the content is stored in a storage device selected from the group consisting of: magnetic tape, compact disc, digital versatile disc, computer hard drive, random access memory, read only memory, CD ROM, a magnetic data storage medium, and an optical data storage medium.

68.   A method as described in claim 44, wherein the online information content relates to a polling question.

69.   A method as described in claim 59, wherein the online information content contains additional information related to the music video program, the additional information selected from the group consisting of: biographical information on an artist, a concert schedule, and information on buying goods related to the artist.

70.   A method as described in claim 44, wherein the online information content contains a query for the user to respond to a poll.

71.   A method as described in claim 44, wherein the online information content is selected based, at least in part, on a user profile.

72.   A method as described in claim 44, wherein the programming is generated based, at least in part, on a user profile.

73.   A method as described in claim 72, wherein the user profile is stored in a storage device at a location selected from the group consisting of: a user station, a personal computer, a cable head-end, a cable box, a satellite receiver, an intranet site, an Internet site, and a satellite operations center.

74. A method as described in claim 44, wherein the address relates to a polling question.

75. A method as described in claim 44, wherein, in the step of selecting, multiple addresses are selected.

5 76. A method as described in claim 44, further comprising the step of retrieving information about a user from a data management storage device.

77. A method as described in claim 76, wherein the method further comprises the step of performing an analysis on the user information.

78. A method as described in claim 76, wherein the user information contains user

10 clicks made by the user on a user interface while using an online service provider.

79. A method as described in claim 76, wherein information about a plurality of users is stored in the data management storage device.

80. A method as described in claim 76, wherein the user information contains information selected from the group consisting of: the geographic location of the user, clicks

15 made by the user on a user interface while using an on line service provider, user viewing habits, and demographics of the user.

81. A method as described in claim 76, wherein the method further comprises selecting the programming based, at least in part, on the user information.

82. A method as described in claim 76, wherein the data management storage

20 device is located at a location selected from the group consisting of: a user station, a personal computer, a cable head-end, a cable box, a satellite receiver, an intranet site, a public network, a private network, and an Internet site.

83.   A method as described in claim 76, wherein the programming contains a predetermined advertisement and wherein selection of the predetermined advertisement is based, at least in part, on the user information.

84.   A method as described in claim 76, wherein the online information content is based, at least in part, on the user information.

85.   A method as described in claim 76, wherein the address is selected, at least in part, based on the user information.

86.   A method as described in claim 76, wherein the online information content contains an advertisement and wherein the advertisement is selected, at least in part, based on the user information.

87.   A method as described in claim 76, wherein the programming signal contains a graphics segment and wherein the graphics segment is selected, at least in part, based on the user information.

88.   A computer readable medium containing instructions for generating and creating information content, to be associated with programming by using addresses identifying online information sources associated with the information content, by:

generating information content, wherein the content is intended to be displayed automatically at a user device concurrently with or in conjunction with the programming; and

selecting an address, wherein the address specifies an online information source associated with the content.

89.   A computer readable medium as described in claim 88, wherein the instructions further comprise the step of associating a time stamp with the address, wherein

- 38 -

the time stamp indicates to the user device when, during the programming, to present the information content associated with the address.

90. A computer readable medium as described in claim 88, wherein the address is an Internet URL, the URL identifying the online information source which is a particular Internet site.

91. A computer readable medium as described in claim 88, wherein the instructions further comprise the step of storing the address in a memory device.

92. A computer readable medium as described in claim 91, wherein the memory device is at least one selected from the group consisting of: magnetic tape, compact disc, digital versatile disc, a server, computer hard drive, random access memory, read only memory, CD ROM, a magnetic data storage medium, and an optical data storage medium.

93. A computer readable medium as described in claim 88, wherein the online information source is an Internet service provider.

94. A computer readable medium as described in claim 88, wherein the information content comprises content in a form selected from the group consisting of: text, graphics, video, data, audio, animation, video stills, slow frame video, and multimedia.

95. A computer readable medium as described in claim 88, wherein the information content relates to a sports program.

96. A computer readable medium as described in claim 88, wherein the information content relates to an advertisement program.

97. A computer readable medium as described in claim 88, wherein the information content is an advertisement.

- 39 -

98.   A computer readable medium as described in claim 88, wherein the information content relates to a motion picture program.

99.   A computer readable medium as described in claim 88, wherein the information content relates to a game show program.

5   100.   A computer readable medium as described in claim 88, wherein the information content relates to a video program.

101.   A computer readable medium as described in claim 88, wherein the information content relates to a live program.

102.   A computer readable medium as described in claim 88, wherein the

10   information content relates to an audio program.

103.   A computer readable medium as described in claim 88, wherein the information content relates to a music video program.

104.   A computer readable medium as described in claim 88, wherein the information content relates to a pre-recorded program.

15   105.   A computer readable medium as described in claim 88, wherein the information content relates to a news program.

106.   A computer readable medium as described in claim 88, wherein multiple addresses are stored in a link file in a server.

107.   A computer readable medium as described in claim 88, wherein the

20   information content is generated based on a profile of a collection of users.

- 40 -

108.   A computer readable medium as described in claim 88, wherein selecting an address further comprises the instruction of obtaining a specific time point, wherein the time point indicates when to transmit the address to the user device.

109.   A computer readable medium as described in claim 88, wherein the information content relates to a sitcom program.

110.   A computer readable medium as described in claim 88, wherein the information content relates to an interactive game show program.

111.   A computer readable medium as described in claim 88, wherein the information content is stored in one selected from the group consisting of: magnetic tape, compact disc, digital versatile disc, computer hard drive, random access memory, read only memory, CD ROM, a magnetic data storage medium, and an optical data storage medium.

112.   A computer readable medium as described in claim 88, wherein the information content relates to a polling question.

113.   A computer readable medium as described in claim 103, wherein the information content contains additional information related to the music video program, the additional information selected from the group consisting of: biographical information on an artist, a concert schedule, and information on buying goods related to the artist.

114.   A computer readable medium as described in claim 88, wherein the information content contains a query for the user to respond to a poll.

115.   A computer readable medium as described in claim 88, wherein the information content is selected based, at least in part, on a user profile.

- 41 -

116. A computer readable medium as described in claim 88, wherein the programming is selected based, at least in part, on a user profile.

117. A computer readable medium as described in claim 116, wherein the user profile is stored in a storage device at a location selected from the group consisting of: a user station, a personal computer, a cable head-end, a cable box, a satellite receiver, an intranet site, an Internet site, and a satellite operations center.

118. A computer readable medium as described in claim 88, wherein the address relates to a polling question.

119. A computer readable medium as described in claim 88, wherein the instructions further comprise the step of retrieving information about a user from a data management storage device.

120. A computer readable medium as described in claim 88, wherein the instructions further comprise the step of performing an analysis on the user information.

121. A computer readable medium as described in claim 119, wherein the user information contains user clicks made by the user on a user interface while using an online service provider.

122. A computer readable medium as described in claim 119, wherein information about a plurality of users is stored in a data management storage device.

123. A computer readable medium as described in claim 119, wherein the user information contains information selected from the group consisting of: the geographic location of the user, clicks made by the user on a user interface while using an on line service provider, user viewing habits, and demographics of the user.

124. A computer readable medium as described in claim 119, wherein the instructions further comprise the step of selecting the programming based, at least in part, on the user information.

125. A computer readable medium as described in claim 119, wherein the data management storage device is located at a location selected from the group consisting of: a user station, a personal computer, a cable head-end, a cable box, a satellite receiver, an intranet site, a public network, a private network, and an Internet site.

126. A computer readable medium as described in claim 119, wherein the programming contains a predetermined advertisement and wherein selection of the predetermined advertisement is based, at least in part, on the user information.

127. A computer readable medium as described in claim 119, wherein the information content is based, at least in part, on the user information.

128. A computer readable medium as described in claim 119, wherein the address is selected, at least in part, based on the user information.

129. A computer readable medium as described in claim 119, wherein the information content contains an advertisement and wherein the advertisement is selected, at least in part, based on the user information.

130. A computer readable medium as described in claim 119, wherein the programming contains a graphics segment and wherein the graphics segment is selected, at least in part, based on the user information.

131. A method for enabling retrieval over a network from at least one server on the network on-line information segments having respective predetermined timing relationship

- 43 -

with and content related to video programming, the on-line information segments being for

display in the respective predetermined timing relationship with the presentation of the video

programming, comprising the steps of:

creating the on-line information segments;

5   storing the created on-line information segments at respective ones of the at least one

server on the network; and

providing at least one address in respective specified timing relationship with the

video programming, the at least one address being usable for retrieving over the network

from respective ones of the at least one server the created on-line information segments for

10   display in respective predetermined timing relationship with the presentation of the video

programming.

132.   A method as described in claim 131, wherein the step of providing at least one

address comprises providing for each one of the at least one address an associated time

indicia for controlling when each one of the at least one address is to be used to retrieve

15   respective ones of the on-line information segments so that the on-line information segments

are retrieved for display in respective timing relationship with the presentation of the video

programming.

133.   A method as described in claim 131, further comprising the steps of

generating a signal carrying the video programming, wherein at least certain ones of the on-

20   line information segments are created and stored at respective ones of the at least one server

in real time with respect to the generation of the signal carrying the video programming, and

providing at least one address for retrieving the real time created information segments in respective predetermined timing relationship with the video programming.

134. A method as described in claim 131, wherein the on-line information segments are created and prestored at respective ones of the at least one server, and the at least one address is pre-recorded and provided in respective specified timing relationship with the video programming.

135. A method as described in claim 131, wherein the network is the Internet; the at least one address comprises at least one uniform resource locator; the at least one server comprises at least one Internet web site; the on-line information segments comprise at least one web page retrievable over the Internet from respective ones of the at least one Internet web site using the at least one uniform resource locator; the step of creating the on-line information segments comprises creating the at least one web page; the step of storing the created on-line information segments comprises storing the at least one created web page at respective ones of the at least one Internet web site; and the step of providing at least one address comprises providing at least one uniform resource locator in respective specified timing relationship with the video programming, the at least one uniform resource locator being useable for retrieving over the Internet from respective ones of the at least one Internet web site the at least one created web page for display in respective predetermined timing relationship with the presentation of the video programming.

136. A method as described in claim 135, further comprising the step of generating a signal carrying the video programming, wherein the at least one web page is created at least in part in real time with the generation of the signal carrying the video programming and

stored at respective ones of the at least one server, and providing at least one uniform

resource locator for retrieving the real time created information segments in respective

predetermining timing relationship with the video programming.

137.   A method as described in claim 135, wherein the at least one web page is

5   created and prestored at respective ones of the at least one Internet web site; and the at least

one uniform resource locator is prerecorded and provided in respective predetermined timing

relationship with the video programming, the at least one uniform resource locator for

retrieving over the Internet from the respective ones of the at least one Internet web site the at

least one prestored web page in respective predetermined timing relationship with the video

10   programming.

- 46 -